

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2019-184-E

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| IN RE: |) | |
| South Carolina Energy Freedom Act |) | |
| (H.3659) Proceeding to Establish |) | |
| Dominion Energy South Carolina, |) | |
| Incorporated's Standard Offer, Avoided |) | DOMINION ENERGY SOUTH |
| Cost Methodologies, Form Contract |) | CAROLINA, INC.'S |
| Power Purchase Agreements, |) | COMMENTS IN RESPONSE TO THE |
| Commitment to Sell Forms, and Any |) | POWER ADVISORY, LLC REPORT |
| Other Terms or Conditions Necessary |) | |
| (Includes Small Power Producers as |) | |
| Defined in 16 United States Code 796, as |) | |
| Amended) - S.C. Code Ann. Section 58- |) | |
| 41-20(A) |) | |

Pursuant to the Hearing Examiner Directive, Order No. 2019-111-H, dated September 23, 2019, Dominion Energy South Carolina, Inc. ("DESC" or the "Company") herein submits its comments on the November 4, 2019 report ("Report") issued by Power Advisory, LLC ("Power Advisory") in the above-captioned docket.¹

GENERAL RESPONSE

At the outset, DESC observes that the statute authorizing the Commission to employ a third-party consultant to assist the Commission in these proceedings does so for a specific purpose. S.C. Code Ann. § 58-41-20(I) provides that "[t]he commission shall engage, for each utility, a qualified independent third party to submit a report that includes the third party's *independently derived conclusions* as to that third party's opinion of each utility's calculation of avoided costs

¹ Contemporaneously with this Response, DESC is filing a Motion to Strike Final Report of Power Advisory, LLC. This Response incorporates by reference all arguments made in DESC's Motion to Strike Final Report of Power Advisory, LLC.

for purposes of proceedings conducted pursuant to this section.” (emphasis added). In order to derive these conclusions, the third-party consultant has the authority to engage in independent factfinding, and is directed to submit “requests for documents and information necessary to their analysis under the authority of the commission,” to which the utility must be responsive. *Id.* Ultimately, the conclusions reached by the third-party consultant in its report are “intended to be used by the commission along with all other evidence² submitted during the proceeding to inform its ultimate decision setting the avoided costs for each electric utility.” *Id.*

Rather than conducting an independent study and analysis of DESC’s avoided costs as provided in § 58-41-20(I), the Report, by its own admission, simply provides Power Advisory’s opinion based on its review and consideration of the testimony offered in these proceedings. *See* Report at iv (“For each of these issues, Power Advisory provided a summary of the positions of both sides and provided its independent opinion based on the evidence provided.”). Indeed, the Report throughout provides summaries of the testimony and the respective positions of the parties to this proceeding for each topic that it addresses, and then merely elects the position with which it most agrees. The weighing and evaluation of testimony, and the responsibility to make findings and conclusions based on the evidence, however, is a responsibility that belongs solely to the Commission—not to Power Advisory. *See* S.C. Code Ann. § 58-3-250(A) (providing that final orders and decisions of the Commission must include “findings and conclusions, and the reasons or bases therefor, upon all the material issues of fact or law presented in the record”).

² DESC notes that it did not have an opportunity to cross-examine Power Advisory regarding its conclusions in this case. This, coupled with the fact that Power Advisory acted outside the bounds of its statutory authority and mandate, and that it has not independently supported its conclusions with facts, violates DESC’s due process rights, and renders the Report inadmissible as a matter of law. *See S.C. Cable Television Ass’n v. Pub. Serv. Comm’n of S.C.*, 313 S.C. 48, 53, 437 S.E.2d 38, 40–41 (1993).

However, absent from the Report is any independent study or analysis as mandated by S.C. Code Ann. § 58-41-20(I). The Report itself acknowledges this omission, recommending to the Commission with respect to a critical determination in this case that it should, “as provided for in Act 62, . . . initiate a study with an independent consultant to assess DESC’s solar integration costs.” Report at iii. Respectfully, DESC submits that this is in fact the task that Power Advisory was hired to perform. Rather than undertake and complete such an independent study, which might assist the Commission in understanding and evaluating the respective positions of the parties in this proceeding, the Report reflects that Power Advisory ignored or misconstrued its duties under § 58-41-20(I), and rather than fulfill its statutory duties, assumes the Commission’s quasi-judicial role of finding facts and reaching conclusions based on a review of the evidence in this case. DESC respectfully submits that this is improper, that Power Advisory has acted outside the bounds of its statutory authority and mandate as such is contemplated in § 58-41-20(I), and that it has failed to complete the task that *was* its responsibility under the statute.³

For the same reasons, DESC submits that the Report and Power Advisory’s conclusions are not helpful for the task that is before the Commission and are not an appropriate basis for a decision in this matter. Because expert opinions without underlying supporting facts are of no consequence and cannot be considered, the Report therefore must be excluded and not considered in this case for any purpose. *See S.C. Cable Television Ass’n v. Pub. Serv. Comm’n of S.C.*, 313 S.C. 48, 53, 437 S.E.2d 38, 40–41 (1993) (“We caution the PSC that its decisions must be based on facts in evidence and not merely on expert opinions which are not supported by facts.”); *see also Nimely v. City of New York*, 414 F.3d 381, 398 (2d Cir. 2005) (“[E]xpert opinions that

³ DESC recognizes that because the Commission is prohibited from communicating with Power Advisory throughout the course of this process, the Commission had no means to ensure that Power Advisory remained within the proper scope of its role and authority. S.C. Code Ann. § 58-41-20(I).

constitute evaluations of witness credibility, even when such evaluations are rooted in scientific or technical expertise, are inadmissible under Rule 702.”); *Hermitage Indus. v. Schwerman Trucking Co.*, 814 F. Supp. 484, 484 (D.S.C. 1993) (Expert testimony cannot provide a legal opinion).

Otherwise, DESC disagrees with a number of the conclusions reached in the Report, each of which is discussed below.

COMMENTS ON SPECIFIC CONCLUSIONS BY POWER ADVISORY

With respect to Power Advisory’s specific recommendations, DESC hereby sequentially responds to these recommendations as they appear in the Report.

I. SOLAR INTEGRATION CHARGES

A. Analysis of Solar Intermittency

Power Advisory incorrectly concludes on page 12 of its Report that DESC’s and Navigant Consulting, Inc.’s (“Navigant”) analyses of solar intermittency do not provide good bases for quantifying additional reserves required to ensure reliable service to DESC’s customers due to the unpredictability of solar generation and the potential for an unexpected loss of generation from these facilities. There are numerous reasons why this general conclusion is erroneous.

As an initial matter, DESC notes again that Power Advisory failed to satisfy its statutory obligation to independently derive an opinion of each utility’s calculation of avoided costs based on its independent analysis of data and information. S.C. Code Ann. § 58-41-20(I). Unfortunately, Power Advisory did not conduct any analysis or “independently derive” any opinions on its own. Instead, Power Advisory simply restated critiques of the methodology and conclusions that were testified to by intervenors. In doing so, Power Advisory improperly assumed a quasi-judicial role, which is exclusively reserved to the Commission, by purporting to weigh the evidence presented by the parties and to issue an arbitrary determination on which proposal it found more reasonable.

In this regard, Power Advisory did not conduct an analysis of what the appropriate amount of flexible reserves would be for DESC to maintain a reliable system in light of the variable nature of solar generation. Rather, it simply concluded that it did not like DESC's and Navigant's proposals and that this issue should "be evaluated in greater detail during the independent study recommended in Act 62 to evaluate the integration of renewable energy and emerging energy technologies into the electric grid." Report at 12.

One of the primary purposes underlying this proceeding is to establish and approve an avoided cost methodology for DESC, and a critical component of the avoided cost methodology is the level of reserves that must be held to integrate variable solar energy while maintaining reliable service to the Company's customers. Even so, Power Advisory failed to conduct an analysis from which rational conclusions could be drawn, or even to provide any guidance as to what the appropriate level of reserves should be, but merely disagreed with the proposals of DESC and Navigant. Adopting Power Advisory's recommendations therefore would make it impossible for DESC to accurately calculate its avoided costs because the methodology essentially advocated by Power Advisory would prohibit the consideration of needed reserves until some point in the future. In this same manner, Power Advisory's conclusion would require DESC's customers to bear all of the costs related to the maintenance of additional reserves, thereby shifting this risk from Qualifying Facilities ("QFs") onto the customers in contravention of the direct requirements of Act No. 62. Accordingly, Power Advisory's recommendations should be excluded and not considered as failing to satisfy the statutory requirements of S.C. Code Ann. §§ 58-41-20(A) and (I).

Even if one gave consideration to Power Advisory's improper assumption of the Commission's quasi-judicial role, the conclusions of Power Advisory are simply not supported by

the record. The Report states that “DESC’s analysis is based on changes in solar generation from one time interval to another, rather than on differences between forecast and actual solar generation for the same interval.” Report at 12. In this regard, Power Advisory concludes that “[m]any ‘drops’ between one hour and the next ... are entirely predictable, and to the extent that they are predictable, do not necessitate additional reserves.” Report at 9. However, Power Advisory fails to take into consideration the evidence of record that demonstrates solar generation can decline over periods that can last up to 4 hours or longer when solar output is reduced. Tr. at 319.6. Also, maintaining reserves equal to 35% of installed solar generation as proposed by DESC only covers 96% of the 1-hour reductions and, therefore, even this level of reserves may not be enough to maintain system reliability. *Id.* DESC also presented evidence that drops of 35% of installed PV Solar MW occur with significant frequency over a one-hour timeframe. Tr. at 176.3. In addition, DESC’s actual operating practice requires additional reserves equal to 40% of actual output for solar intermittency. Tr. at 176.7. Ignoring this unrefuted evidence of record, Power Advisory recommends the complete elimination of the Company’s flexible reserves simply because Power Advisory chose not to perform a rigorous analysis and therefore believes the Company’s reserves may be at a higher level than necessary. If implemented, this proposal would ignore the actual costs to the system to integrate non-dispatchable solar energy, would result in excessive costs to customers, and would be irresponsible. *Id.*

Power Advisory also states “that using a four-hour-ahead forecast is overly conservative and contributes to a need for higher reserves than would be required under an appropriate application of best practices.” Report at 12. However, the record reflects that the 4-hour ahead forecast is provided by the United States National Renewable Laboratory (“NREL”) in a dataset created specifically of renewable integration studies. Tr. at 300.17. Furthermore, DESC’s

operating experience shows that the loss of solar generation does not usually occur as a single nearly-instantaneous event but often occurs as a decline in generation that stretches over multiple 15-minute intervals. Tr. at 176.8. Because the probability is significant of a coincidence of a thermal unit's forced outage and a large unplanned drop in PV Solar persisting for hours, prudent operators must consider and plan for both contingencies happening together. Tr. at 176.9. Therefore, in responding to solar intermittency, consideration of 15-minute and 1-hour drops is necessary, and if the next available unit takes 3 to 4 hours or more to ramp up to supply load, the evaluation of risk and reserves must be considered 3 to 4 hours out from the present time. *Id.* This is why the flexible reserves for solar intermittency must be maintained in addition to the underlying contingency reserve requirement and may require consideration of events stretching out over 15 minutes, an hour, or up to 4 hours out. *Id.*

Power Advisory also suggests that Navigant failed to consider the ability for units such as combined-cycle ("CC") to start up and provide power. This simply is untrue. DESC Witness Tanner specifically noted in his testimony that the model was developed to allow CC units to provide reserves as long as they are operating, but were not allowed to provide reserves when they are offline. Tr. at 300.9. He further stated that one of the potential system changes that the model represents when additional reserves are added to the system is that CC units can be turned on in the model and then will be operating and able to provide the needed reserves when required in real-time, which is one of the potential drivers of system cost increases in the model. Tr. at 300.9-10.

Power Advisory purports to justify its conclusion by stating that it "attempted to replicate the 'actual' data used by Navigant based on four NREL sites." Report at 11. Based on this analysis, which Power Advisory acknowledges is "simplistic," it determined that "the 'drop' between

forecast and actual generation was less than 16.8% of installed capacity in 99% of intervals.” *Id.* Although Power Advisory discounts its own analysis stating that “it is *likely* that one-hour-ahead forecasts *could be* significantly more accurate” and that Power Advisory is not suggesting that this reflects the appropriate risk threshold, *id.* (emphasis added), Power Advisory refused to take even this level of reserves into consideration as part of the approved avoided cost methodology. Instead, Power Advisory recommends that the Commission simply delay consideration of this issue, meaning that customers will bear the full burden of these costs until such time as another independent study is conducted and completed and the Commission approves a change to the avoided cost methodology.

B. Risk Threshold

Similarly, Power Advisory failed to conduct any independent analysis with respect to an appropriate risk threshold for DESC in calculating avoided costs. Instead, it merely concludes that “none of the three standards used by DESC to determine the additional reserves attributable to solar generation ... have been adequately justified as a reasonable balance between costs and risks.” Report at 15. And even though it recognized “that this isn’t a simple or straight forward analysis,” Power Advisory did not conduct any analysis to determine an appropriate level of reserves, but simply stated that it “believe[s] that greater analytical rigor is required ... to ensure a reasonable trade-off between reserve costs and risks.” *Id.*

The record, however, contains clear evidence demonstrating the reasonableness of DESC’s proposals in this regard. With respect to Navigant’s use of a 1% threshold to avoid the most extreme events in the data set, the Navigant report made clear that, “[s]ince DESC must maintain self-sufficiency, it is necessary to plan for the worst case drops in solar generation.” Hr’g Ex. 5, MWT-2 at 22. Dr. Tanner also testified that “[u]sing a 1% threshold as the estimate of solar

uncertainty reflects an expectation that DESC would have an insufficient amount of generation due to unanticipated loss in solar generation approximately 30 to 50 hours per year.” Tr. at 300.4. Accordingly, using even a 1% threshold suggests that customers will be at risk of losing reliable service for significant periods of time. In addition, Dr. Tanner testified that “when these unanticipated losses in solar generation will occur” and “[w]hether there will be capacity on the system at the time to respond to them without disrupting service to customers is uncertain.” *Id.* On this basis, Navigant “determined that assuming a 1% level of solar uncertainty provides the appropriate tradeoff between the cost of holding more reserves and mitigating risk from undergeneration.” *Id.*

Power Advisory’s criticism of DESC’s use of a 35% standard to cover 96% of drops also is without merit. The Report states that “[t]here is no analysis to support 96% coverage, rather than the maximum observed drop or some lower metric.” Report at 14. Again, Power Advisory provides no analysis on what this “lower metric” should be; consequently, without any analysis, Power Advisory’s recommendation is unsupported and arbitrary. In contrast, DESC Witness Neely provided concrete evidence that “maintaining additional reserves equal to 35% of installed solar generation only covers 96% of the 1-hour reductions and, therefore, even this level of reserves may not be enough to maintain system reliability.” Tr. at 319.6. Further, Witness Neely testified that, “if the 4-hour reductions were used as the basis for additional reserves, then the reserves would need to be increased to greater than 60% of the installed solar generating capacity.” *Id.* Furthermore, DESC Witness Hanzlik testified that, based on actual operating experience and what the Company sees in real-time with respect to fluctuations in solar output, even a 35% reserve margin is insufficient to operate the system in a manner that provides reliable service to its customers. Tr. at 215. Accordingly, DESC’s proposal to calculate avoided costs based on the need

to maintain additional reserves equal to 35% of installed solar generation reflects an appropriate balance between costs and risks, which is exactly what Power Advisory proposes should occur.

C. Constant Reserve Levels

Power Advisory also improperly criticized the simulations used to estimate additional costs due to solar generation for not varying reserve levels in proportion to solar generation. Once again, Power Advisory conducted no analysis or calculation of what a proper reserve level should be, as required by S.C. Code Ann. § 58-41-20(I).

Nevertheless, Power Advisory stated that “[i]t seems highly unlikely that” maintaining increased reserve levels across all hours “didn’t have material impact on [DESC’s] estimates of system operating costs.” Report at 18; *see also id.* at 19 (“DESC’s avoided cost simulations *could also be* overstating solar integration costs, even though they did not maintain additional reserves overnight.”) (emphasis added). Putting aside the speculative nature of this statement, Power Advisory also made the baseless assertion that “Dr. Tanner’s conclusion (that the additional reserves required overnight ‘do not materially impact the overall system operating costs’) does not logically follow from his statement that ‘average reserves held on DESC’s system are over 1,500 MW’ in non-solar generating hours” and that “Dr. Tanner’s statement could only be true if none of those selected hours occurred at night.” *Id.* Power Advisory provides no support for this conclusory statement.

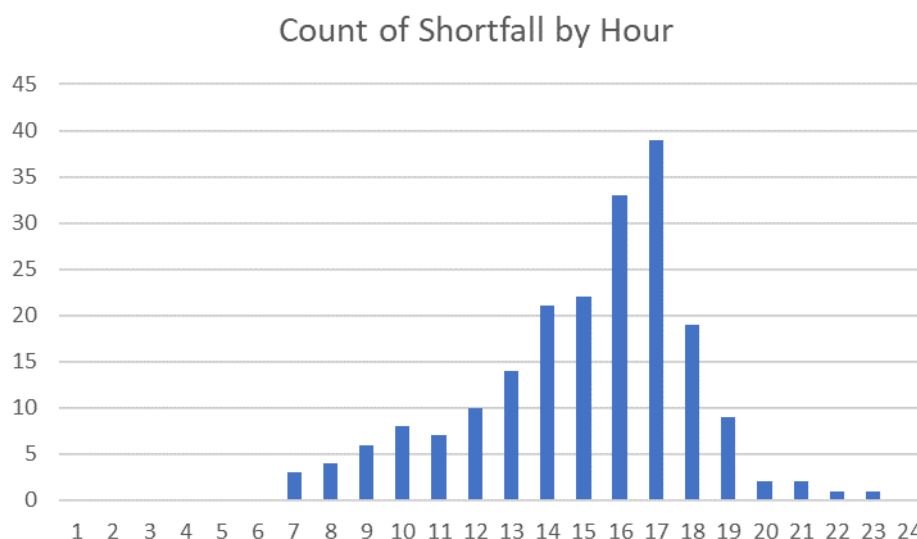
With regard to Power Advisory’s claim that Navigant did not model reserve requirements appropriately because the requirements did not vary hour to hour, Dr. Tanner explained that different cases were blended to ensure that solar variability was taken into account. Specifically, he stated:

In nighttime hours, DESC has more than enough reserves available from thermal units that are operating at less than full capacity. It can rely on ramping

these units up as needs require, while using the fast-start capabilities of its Combustion Turbines as well. (Except at winter peaks, Combustion Turbines are rarely in use at night and so are available as reserves.). The Fairfield Pumped Storage plant also would be available to provide reserves during these nighttime hours. Thus, in the hours when the sun is not shining, the model shows that average reserves held on DESC's system are over 1,500 MW. By contrast, the planning model only required that 240 MW be held in the business-as-usual (i.e., non-solar) reserves case. This means that the additional reserves required for solar integration are not a binding constraint on the system in non-solar hours and thus do not materially impact the overall system operating costs or contribute to the calculation of the [VIC].

Tr. 300.5-6. The following chart from Hearing Exhibit 5, MWT-2 at 25 also shows that reserve issues occur during the day and not overnight:

Figure 1. Reserve Shortfalls by Hour in All Solar Case



Power Advisory admits, however, that “[i]t is theoretically possible that the modeled cost of maintaining these extra reserves is low” because “in most hours, especially overnight, DESC holds more than the minimum necessary reserves through their least-cost security constrained dispatch.” Report at 17 (quoting Hr’g Ex. 5, MWT-2 at 28). On this very point, Dr. Tanner testified that “[i]n nighttime hours, DESC has more than enough reserves available from thermal units that are operating at less than full capacity” and “can rely on ramping these units up as needs require,

while using the fast-start capabilities of its Combustion Turbines as well.” Tr. at 300.5. Rather than conduct a reasonable analysis of these issues and attempt to calculate an appropriate reserve level for DESC’s system, Power Advisory ignores them and concludes that DESC’s reserve levels must be too high and rejects the avoided cost methodology on this basis. Such a conclusion is arbitrary and capricious.

D. Alternative Mitigation Options

Regarding alternative means of ensuring adequate reserves, Power Advisory again provides no independent guidance as to what types of alternative resources could provide reserves at a cost-effective level. Its review of this issue, however, is even more superficial than those previously addressed. Here, Power Advisory merely quotes opposing portions of testimony and then, without explanation, concludes that “Navigant and DESC did not adequately evaluate alternative means of ensuring adequate reserves.” Report at 21. Power Advisory also suggests that DESC should have considered alternative means of ensuring adequate reserves by considering “other value streams,” *id.*, but fails to identify what those “value streams” might be or why it would be reasonable for DESC to have considered them. Regarding demand response, Power Advisory quotes the testimony of the South Carolina Coastal Conservation League and Southern Alliance for Clean Energy Witness Stenclik that “[peaking] demand response is fundamentally different than demand response for operating reserves as it typically requires at least 4-hours of customer load interruption.” Report at 21 (quoting Tr. at 640.22). However, it ignores the Company’s testimony that “relying upon interruptible load to meet daily operating reserve (contingency and flexible) requirements would significantly increase the number of curtailments and result in substantial additional economic impacts to interruptible customers.” Tr. at 300.11. Similarly, Power Advisory suggests that DESC failed to consider “that *some kind* of reserve sharing for solar

integration will occur at *some point* over the period for which these rates would apply.” Report at 21. Not only is this statement hypothetical, at best, it also disregards the Company’s testimony that such a reserve sharing program would be neither “quick, easy or cheap to implement.” Tr. at 300.16.

To the contrary, the Company presented testimony that “combining Balancing Areas or expanding reserve sharing agreements would require a large, long-term effort in evaluating the impacts of the change and then a likely larger effort to negotiate and implement the agreement” and that “[d]oing so will require coordination with multiple utilities and stakeholders and likely would raise important legal issues.” Tr. at 300.16. In this regard, and in response to a request by Commissioner Ervin, DESC inquired of Southern Company as to whether it would have an interest in joining the VACAR Reserve Sharing Group and it responded that it was not interested in doing so. *See* DESC Letter dated October 30, 2019.

Navigant also considered other sources to provide reserves, including adding a gas-fired peaking facility or storage to the system to provide flexible reserves for renewable integration, as Power Advisory suggests. Specifically, DESC Witness Tanner testified, however, “[b]oth of these were excluded as too expensive” and it was “not appropriate to consider other benefits of those projects because DESC does not need any new resources at the moment and so these would be added solely to integrate renewable power.” Tr. at 300.11. Further, he testified that it would be appropriate to include on-site flexibility, but that “aspects of the contracts with DESC for these resources would need to be modified in order to ensure that the necessary flexibility is being provided to the system.” Tr. at 300.12.

E. Integration Charge Conclusions

On pages 22 through 25 of the Report, Power Advisory summarizes its conclusions regarding the solar integration costs, which is merely a restatement of the issues identified above. For the same reasons discussed previously, Power Advisory's recommendations are without merit and fail to comply with the statutory intent and duties of the independent third-party consultant contemplated by S.C. Code Ann. § 58-41-20(I) to come to an "*independently derived* conclusion[]" as to [its] opinion of each utility's calculation of avoided costs" based on its review of information "necessary to [its] analysis," not those conducted by the parties of record. (emphasis added).

Notwithstanding Power Advisory's unsubstantiated suggestion that it did not have sufficient information to recommend what it believes to be an appropriate level of avoided cost, it states that DESC should use ORS's "estimate (\$2.29/MWh) as the VIC, and adjusting DESC's embedded integration costs and adjusting DESC's other solar rates (including PR-1, Avoided Cost, and DER rates) to remove DESC's embedded integration costs and replace them with the same amount (\$2.29/MWh) for all periods under consideration." Report at 25.

It is entirely unclear what Power Advisory is suggesting in this regard. Power Advisory expresses concern "that the avoided cost estimates presented by DESC are not reliable," Report at 39, and, therefore, they have posited no recommendation as to how DESC should calculate the base avoided costs prior to accounting for the VIC. On the one hand, Power Advisory may be understood to propose that DESC reduce its updated avoided cost calculation by an insufficient VIC charge of \$2.29/MWh, which would result in excessive avoided costs, and, thus, violate PURPA, FERC's implementing regulations and orders, and Act No. 62.

On the other hand, if Power Advisory is suggesting that no adjustments to DESC's current avoided costs should be allowed and that the recommended adjustment should be made to the

avoided costs last approved by the Commission in Order No. 2018-322(A), DESC submits that such a recommendation would be wholly inappropriate. Such a recommendation is a total abdication of Power Advisory's duty to independently analyze and calculate what DESC's avoided costs should be. Instead, it would merely be suggesting that DESC should continue to use avoided costs that are based on stale circumstances and data that are approximately two years old and do not reflect current conditions. Furthermore, this suggestion would provide no guidance as to the methodology DESC should use to calculate the base avoided costs for future PPAs (not including integration costs), which this Commission is required to approve pursuant to S.C. Code Ann. § 58-41-20(A).

Putting that issue aside, Power Advisory's recommendation that DESC should use ORS's estimate of \$2.29/MWh as the integration costs is made without any independent analysis of what the actual integration costs should be. Rather, Power Advisory merely acquiesces to this proposal even though it states that it does "not support the specific calculations [ORS] used to arrive at \$2.29/MWh," but simply suggests that "its magnitude is reasonable compared to the other solar integration costs proposed," in part based upon ORS's testimony that this amount is similar to the values proposed by Duke Energy Progress and Duke Energy Carolinas. Report at 24. *But see* Report at 25, Fig. 2 (demonstrating that \$4.14/MWh is in line with variable integration cost expectations considering the level of solar QF integration). Not only does this amount to essentially "picking a number out of the air," it also is contradictory to Power Advisory's acknowledgement "that caution should be exercised when comparing avoided cost estimates between two different companies and when doing so consideration needs to be given to differences in their resource mix and demand profile." Report at 39, n.121. In recommending the \$2.29/MWh, Power Advisory has given no such consideration to whether this is an appropriate amount for DESC given its system

characteristics. Our Supreme Court has ruled that the Commission may not base its decisions on citations to its past decisions related to the specific utility in question. Even more, it cannot rely blindly on decisions that apply to other utilities whose circumstances are different. *See Porter v. S.C. Pub. Serv. Comm'n*, 333 S.C. 12, 26–27, 507 S.E.2d 328, 335 (1998). Accordingly, Power Advisory’s recommendation should be rejected as failing to constitute an independent analysis as required by S.C. Code Ann. § 58-41-20(A).

II. STANDARD OFFER AND AVOIDED COST METHODOLOGIES

A. Avoided Energy Costs

1. DESC Methodology and Results

In analyzing DESC’s proposed methodology and results, Power Advisory again does not make any independent analysis as to the appropriateness of the methodology to be used to calculate avoided costs. As it does with a number of issues, it simply restates the proposed methodology, the other parties’ criticisms of it, identifies some issues about which it has “concerns,” but then provides no recommendation as to how the methodology should be modified to accurately estimate avoided costs as is required in this proceeding.

The first basis for Power Advisory’s ineffective finding in this regard is its allegation that “a range of intervenors have indicated” carrying 35% of installed solar capacity in incremental operating reserves “results in is (*sic*) a large overstatement of integration costs.” DESC’s rebuttal to this criticism is discussed further above.

Power Advisory then selects two model iterations from a single year out of 10 years that were modeled 10 times to suggest that it could not “reconcile [a] pattern of very high overnight costs when there should be no incremental ancillary services costs from solar generation (as there would be no solar output) against minimal on-peak avoided energy costs.” Report at 32. As an

initial matter, DESC has no record of Power Advisory conducting any inquiry of DESC as to this issue.⁴ Instead, it appears that Power Advisory has merely highlighted selected data about which it “has concerns,” but conducted no further analysis or investigation as to whether or not these findings were reasonable or the basis for them.

Regardless, Power Advisory only concludes that “[t]he results for the solar generation avoided cost estimates *appear* to demonstrate an extreme level of modeling uncertainty,” which “*calls into question*” the reliability of the results. Report at 33-34 (emphasis added). Therefore, rather than providing an analysis that is useful to the Commission or the parties to this proceeding, the Report recommends only that “these results should be examined in much greater detail than was possible given the timing and lack of supporting data provided by DESC.” Report at 34. This, even though Power Advisory recognizes that “[o]ther factors such as differences in unit commitment are a possible explanation, but accepting this as the driver would require much more information than available.” Report at 35. In effect, Power Advisory has ignored its obligations in this proceeding and merely suggests that the Commission should “kick the can down the road” instead of offering any useful analysis upon which DESC’s avoided costs can be determined as required by Act No. 62.

2. Transparency

While most of its conclusions demonstrate a failure of Power Advisory to satisfy its statutory role in this proceeding, Power Advisory exceeds its authority in suggesting a quasi-judicial determination that DESC did not meet the transparency requirements of Act No. 62. As

⁴ Notwithstanding Power Advisory’s assertion that DESC’s filing was not transparent, which is addressed in Section II.B.2, *infra*, it noted that “DESC cooperated as would be expected” with Power Advisory’s “development of the report” and fulfillment of its “material information requests.” Report at 5. It therefore is perplexing why Power Advisory summarily decided it could not reconcile these issues when DESC admittedly was cooperative with its consideration of these issues. Power Advisory simply failed to make any further inquiry into, much less properly investigate, these issues so that it could conduct an independent analysis as required by S.C. Code Ann. § 58-41-20(I).

discussed previously, the independent third-party consultant is required only to (1) conduct an independent analysis regarding avoided costs and (2) make “a statement assessing the level of cooperation received from the utility during the development of the report and whether there were any material information requests that were not adequately fulfilled by the electrical utility.” § 58-41-20(I). In this latter regard, Power Advisory concluded that, in fact, “DESC cooperated as would be expected” with Power Advisory’s “development of the report” and fulfillment of its “material information requests.” Report at 5. Thus, its suggestion that “there remain significant questions as noted in this chapter that cannot be answered with the information provided” is belied by its acknowledgement that DESC cooperated with Power Advisory as required by Act No. 62. Simply because Power Advisory may not have asked for the information it now claims was necessary to conduct its analysis does not amount to a lack of transparency on the part of DESC.

Through its Report, however, Power Advisory also improperly inserted itself as a “fact-finder” as to DESC’s participation in discovery with the other parties of record, even though it was not a party to the case, had no involvement in the discovery process, and bases its conclusions solely on the allegations advanced by the other parties of record. Specifically, Power Advisory suggests that DESC somehow was not transparent because one party felt it necessary to submit a second interrogatory request for additional information, which it asserts “consumed valuable time in any (*sic*) already compressed schedule.” Report at 36. Power Advisory simply has no authority to reach such a conclusion and the Commission should disregard this conclusion as exceeding the parameters of the independent third-party consultant’s role in this proceeding.

3. Technology Neutral Approach

With respect to the technology-neutral avoided cost proposed by the South Carolina Solar Business Alliance (“SCSBA”) in these proceedings, Power Advisory again is unhelpful in its

analysis of this issue. Following a recitation of the conflicting proposals, Power Advisory provides a vacillating conclusion that, while SCSBA's proposal may be reasonable, it is concerned that "it may be necessary to develop a large number of groupings to reflect value from generators with highly correlated profiles, such as solar." Report at 37. Like its other conclusions, Power Advisory provides no independent analysis in this regard, but only points to various issues identified in the testimony and gives no guidance as to how to proceed or how these issues should be addressed in Rate PR-1 or Rate-Standard Offer.⁵ Yet, Power Advisory does not address or even consider why a technology neutral rate would be reasonable or even appropriate in light of the fact that all of the recent QF projects, reflecting 1,048 MW of nameplate capacity, have consisted of non-dispatchable solar projects, Tr. at 319.20, which is what DESC's avoided cost methodology is designed to address. Only technologies that can arbitrage hourly price differences would benefit from a technology neutral or time period approach to avoided cost rates. Such avoided costs tariffs can be implemented per the approved avoided cost methodology when the need arises. In short, Power Advisory's "assessment" on this issue provides no value to the Commission's determination of this issue and therefore should be ignored.

PURPA requires that the rates for purchases of energy from QFs not exceed "the cost to the electric utility of the electric energy which, but for the purchase from such [QF], such utility would generate or purchase from another source" at the time of delivery. Naturally, the goal of an avoided energy cost calculation is to calculate the avoided energy costs as accurately as possible.⁶ Hence, Act No. 62 specifically allows resource-specific rates. This accuracy, however, simply is not possible with a technology neutral approach considering the large amount of these highly

⁵ Power Advisory quotes the rebuttal testimony of DESC Witness Neely in recognition of the fact that "the Form PPA envisioned by Act No. 62 allows utilities to calculate resource specific avoided cost rates." Report at 37.

⁶ 16 U.S.C. § 824a-3(b), (d).

correlated solar installations operating on DESC's system or under a PPA. As the Commission is well aware, DESC began calculating its avoided energy costs for solar using a typical 100-MW solar profile in its Docket No. 2018-2-E. DESC then argued that, because there was so much solar capacity coming onto the system, the only way to get an accurate estimate of the avoided energy costs of additional solar was to calculate the difference in revenue requirements related to energy based on an actual 100-MW solar profile. In its Order No. 2018-322-A, the Commission agreed with the Company's reasoning and approved this approach. The avoided energy cost methodology proposed in this proceeding simply updates the same methodology approved by the Commission.

Power Advisory further claims that the profile of stand-alone solar and solar plus storage are significantly different. While DESC agrees with this general conclusion, the Company would note that, in this proceeding, it has only filed an avoided cost rate for stand-alone solar and that a rate for solar plus storage will be a matter for consideration in a future proceeding. As DESC explained several times during the proceeding and Power Advisory acknowledged, DESC entered into a prior settlement agreement with the SCSBA, which was filed with the Commission in Docket No. 2017-370-E, to propose a storage rate prior to the end of 2019. *See* Tr. at 66.23 (quoting Settlement Agreement at 5); Report at 62. And DESC plans to meet its obligation under the Settlement by making a filing with the Commission on or before December 31, 2019. Tr. at 66.23. Section 14 of Act No. 62 specifically addresses prior settlements such as this one, stating "[t]he provisions of Section 58-41-20 shall not be interpreted to supersede the conditions of any settlement entered into by an electrical utility and filed with the commission prior to the adoption of this act." Furthermore, given DESC's position that such storage would need to provide a minimum of 15 MW-AC and have the ability to deliver its maximum capacity for four consecutive hours when fully charged, the avoided costs for such projects would be separately determined as

part of the Form PPA negotiation. Therefore, by agreement, it is unnecessary to address this issue at this time.

4. Selection of Pricing Periods

With respect to the pricing periods to be used to determine avoided costs, Power Advisory here again merely recites conflicting testimony and then arrives at the conclusion that DESC should provide support for the pricing periods that it employs in its next avoided cost filing. This recommendation is meaningless as it provides no guidance to the Commission or the parties to this proceeding as to what effect this issue has on the avoided cost methodology required to be approved in this docket. Rather, Power Advisory's suggestion is only that additional information be provided in future filings. Furthermore, Power Advisory completely ignores the fact that the selection of these pricing periods was questioned as recently as the Company's 2017 fuel hearing in Docket No. 2017-2-E, that the Company provided its justification for their selection, and that the Commission found that the Company's "selection of peak seasons and hours is reasonable and appropriate and consistent with the methodology approved by the Commission in Order No. 2016-297." Order No. 2017-246 at 19. Power Advisory's conclusion and recommendation therefore is of no help as to what, if any, changes to the methodology should be made in connection with this docket in order to determine avoided costs for future PPAs.

5. Avoided Energy Cost Conclusions and Recommendations

On pages 38 through 39 of the Report, Power Advisory summarizes its conclusions regarding avoided energy costs, which is merely a restatement of the issues identified above. For the same reasons discussed previously, Power Advisory's recommendations are without merit and fail to comply with the intent and duties of the independent third-party consultant contemplated by

S.C. Code Ann. § 58-41-20(I) to offer an independent analysis regarding its opinion of DESC's calculation of avoided costs.

As with the issues addressed with solar integration costs discussed previously, however, Power Advisory makes no recommendation as to what avoided energy costs the Commission should approve in this proceeding. While Power Advisory makes a recommendation with respect to adjusting avoided energy costs to reflect an integration cost of \$2.29/MWh, there is no analysis as to what the unadjusted avoided energy costs should be or how to calculate them. In fact, Power Advisory concludes "there aren't specific changes to the methodology and assumptions that they can recommend." Report at 39. This clearly demonstrates Power Advisory's entire analysis is not based on any independent analysis, but merely upon a recitation of conflicting testimony, concluding that there are uncertainties with the methodology, and failing to provide any guidance to the parties or the Commission as to how those issues should be addressed *in this proceeding*. Given the complete lack of any substantive or independent analysis, the Commission therefore should decline to give the Report any weight in reaching its decision in this matter.

B. Avoided Capacity Costs

1. DESC's Capacity Value Methodology

With respect to the methodology that should be used to determine DESC's avoided capacity costs, Power Advisory does not make an independent determination, but simply adopts the recommendations of one of the other parties of record. Specifically, Power Advisory concludes that the Effective Load Carrying Capacity ("ELCC") methodology is industry-standard and reflects a probabilistic approach to resource modeling without identifying any independent basis upon which it reaches that conclusion or citing any authority justifying its decision in this regard. In doing so, Power Advisory ignores the testimony of DESC Witness Lynch who explains the

ELCC methodology is simply an application of the Loss of Load Expectation (“LOLE”) methodology, which is not appropriate for DESC.

Specifically, Dr. Lynch explains that the LOLE methodology addresses average risk for the entire year and that an unacceptable risk level on the peak day can be hidden by the summary result for the year. Tr. at 276.24. Because of this, risks related to weather spikes in seasonal peaks, such as those experienced by DESC, must be modeled directly as the Company proposes in its methodology and not by the ELCC method. Tr. at 276.25, 283.4-5. Furthermore, Power Advisory recommends the imposition of a VIC and solar integration charge, albeit one that is lower than proposed by DESC. This means it understands and accepts that the uncertainty of solar output requires DESC to set aside a certain amount of capacity as additional operating reserves. Thus, Power Advisory inherently acknowledges that non-dispatchable solar generation results in a reduction of capacity available to serve customer loads and, therefore has a negative capacity value throughout the year, which the ELCC methodology ignores. Instead of considering this issue, however, Power Advisory simply disregards it, demonstrating its lack of any independent determinations in its Report.

Power Advisory also relies upon the ELCC methodology for its assessment that non-dispatchable solar QFs should be paid a capacity credit based on 4% of their installed capacity. Power Advisory seems to forget, however, that the avoided costs are calculated to apply to the next increment of solar. As Dr. Lynch showed in direct testimony, even in the case where DESC’s winter peak occurs unusually late in the morning as it did on January 5, 2018, when it occurred in the interval ending at 8:00 a.m. at a time when solar was generating a small amount of capacity, the solar capacity beyond 500 MW had no effect on the peak demand. Tr. at 276.8. Because there already is 1,048 MW of solar under contract, this means that any incremental solar capacity will

not allow DESC to avoid adding capacity and, therefore, the incremental solar has zero capacity value. Because non-dispatchable solar does not allow DESC to avoid any future capacity needs, this means that the Company's customers will pay twice for the same amount of capacity: first to the solar farms for capacity they do not actually provide, and again when DESC actually purchases the needed capacity by constructing a new generation facility or acquiring capacity in some other manner. Power Advisory's assessment in this regard therefore is not only inappropriate, but also contrary to the requirements of Act No. 62 in that it requires customers to bear more cost than they otherwise should.

Power Advisory also relies upon the contention of SCSBA that the closeness of DESC's summer and winter peak demands supports the recognition of a year-round solar capacity value. However, this reflects a surprisingly simplistic understanding of DESC's resource plan. Using data from DESC's 2019 Integrated Resource Plan, DESC demonstrated that, although the winter peak forecast for 2022 is 59 MW above the summer, the additional need for capacity in winter, net of seasonal effects, is 766 MW. As shown in the following table, the summer peak in 2022 would have to be about 611 MW greater than the winter peak demand to make the need for capacity equal in both seasons. Clearly the need for a 21% reserve margin in winter relative to the summer's 14% and the very significant contribution to capacity made by solar in the summer relative to a zero contribution in winter are the driving factors for the relative seasonal need for capacity. The relative closeness of the summer and winter peak demand is insignificant compared to these two factors.

| From 2019 IRP | 2022 Forecast | | | 2022 Forecast Adjusted | | |
|----------------------------------|---------------|--------|------|------------------------|--------|------|
| | Summer | Winter | Dif. | Summer | Winter | Dif. |
| Seasonal Peak Demands | 5,019 | 5,078 | -59 | 5,689 | 5,078 | 611 |
| Reserve Margin Requirement | 1.14 | 1.21 | | 1.14 | 1.21 | |
| Resulting Capacity Need | 5,722 | 6,144 | -423 | 6,485 | 6,144 | 341 |
| Winter Turbine Advantage | | -168 | | | -168 | |
| Solar Capacity Advantage | -482 | | | -482 | | |
| DR Summer Advantage | -29 | | | -29 | | |
| Net Additional Need for Capacity | 5,211 | 5,976 | -766 | 5,974 | 5,976 | -2 |

In making its assessment, Power Advisory also ignores the guidance provided by FERC in *Small Power Production and Cogeneration Facilities; Regulations Implementing Section 210 of the Public Utility Regulatory Policies Act of 1978*, Order No. 69, 45 Fed. Reg. 12,214, 12,216 (Feb. 25, 1980) when it stated:

If a qualifying facility offers energy of sufficient reliability and with sufficient legally enforceable guarantees of deliverability to permit the purchasing electric utility to avoid the need to construct a generating unit, to build a smaller, less expensive plant, or to reduce firm power purchases from another utility, then the rates for such a purchase will be based on the avoided capacity and energy costs.

Because solar power does not allow DESC to avoid capacity, it therefore should not be paid an avoided capacity credit, contrary to what Power Advisory suggests.

In short, Power Advisory's assessment is based solely on its adoption of the positions of the other parties and not based on any independent determination, which is what it was required to do under S.C. Code Ann. § 58-41-20(I). In so doing, Power Advisory recommends that customers pay more for non-dispatchable QF purchases than they should, which is directly contrary to the requirements of PURPA, FERC's implementing regulations and orders, and Act No. 62. Accordingly, its assessment should not be considered to be appropriate for use in this proceeding.

2. DESC Capacity Cost Methodology

Power Advisory next makes the conclusory statement that "capacity requirements are not typically bifurcated as base and short-term as has been done by DESC." Report at 44. Once again,

Power Advisory does not make any attempt to show what is specifically appropriate for the Company or to show that DESC's approach is unjustified. Instead, it relies upon generic statements and unsupported assertions to reach its conclusion in contravention of the facts on the record and the requirements of S.C. Code Ann. § 58-41-20(I).

In making this assessment, Power Advisory ignores the fact that DESC does indeed bifurcate its capacity needs into base and peaking. In the winter, the peaking need can be approximately 350 MW above the base need, which reflects the difference between 21% and 14%. Because the peaking need will occur for a few hours on a few days in winter, DESC does not currently find that it would be necessary or appropriate to construct a power plant only for the purposes of serving this periodic peaking need. Bifurcating its capacity needs therefore allows DESC to lower the cost of the capacity that it purchases to meet the difference between the 21% and 14% winter reserve margin which reduces its customers' cost of power. This is in fact how DESC manages its capacity needs. Power Advisory ignores this issue, however, thereby concluding that customers should pay more for avoided costs than they otherwise would.

Power Advisory further recommends that the capacity credit should be based on a combustion turbine and the overall capacity need of 21%. However, there absolutely is no support to be found anywhere in PURPA law, FERC regulations or orders, Commission Orders, or Act No. 62 that would suggest, much less require, that DESC should pay more than its avoided costs. To the contrary, and as is reflected in innumerable decisions related to avoided costs, only if a QF can help the electric utility avoid a peaking resource should it then be compensated for this avoided capacity. Because non-dispatchable generation does not allow DESC to avoid any of its future capacity needs, Power Advisory's assessment again would result in customers paying more than

is required for avoided costs, thereby increasing their rates unnecessarily. DESC believes this not only is unreasonable, but also directly contrary to the intent and plain language of Act No. 62.

3. DESC Capacity Cost Assumptions

With respect to the assumptions underlying DESC's capacity cost calculations, Power Advisory returns to its superficial analysis of reciting conflicting testimony and then, without any further scrutiny or supporting basis, agrees with ORS's position that, in calculating capacity costs, DESC should have used a 93 MW combustion turbine and a 20-year asset life. Putting aside that this is not an independent determination by Power Advisory, it wholly ignores PURPA law which specifically allows DESC to use a 100 MW change to calculate its capacity costs. *See* 18 C.F.R. § 292.302(b)(1). It also disregards the Commission's prior acknowledgment and finding that a peaking turbine has a useful life of 60 to 75 years. Tr. at 319.2; "SCE&G 2014 Depreciation Study" filed in Docket No. 2015-313-E; Order No. 2015-693. Because there is no support for this finding and because it contradicts prior determinations by this Commission, Power Advisory's assessment should therefore be rejected.

4. Avoided Capacity Cost Conclusions and Recommendations

On page 46 of the Report, Power Advisory summarizes its conclusions regarding avoided capacity costs, which is merely a restatement of the issues identified above. For the same reasons discussed previously, Power Advisory's recommendations are without merit and fail to comply with the intent and duties of the independent third-party consultant contemplated by S.C. Code Ann. § 58-41-20(I) to offer an independent analysis regarding DESC's calculation of avoided costs.

III. FORM CONTRACT POWER PURCHASE AGREEMENTS, COMMITMENT TO SELL FORMS, AND OTHER RELATED TERMS AND CONDITIONS

A. Reasonableness of 10-year PPA Contract Length in South Carolina

As described by Power Advisory, the tenor of PPAs was an issue in this proceeding with DESC proposing a 10-year term and certain intervenors asserting that longer contract lengths were needed for QFs to secure regularly-available financing. As to this issue, Power Advisory does not make a recommendation, and rightfully so. Power Advisory accurately states that “Act No. 62 by no means establishes securing financing or ensuring QF project development as a threshold.” Report at 49.⁷ The only requirement of Act No. 62 is that electrical utilities must offer to enter into a PPA with a tenor of 10 years, and that the Commission *may* approve PPAs with longer tenors, as long as those PPAs contain additional terms, conditions, and/or rate structures as proposed by intervening parties and approved by the Commission. Here, no intervening party proposed any additional terms, conditions, or rate structures that would support a PPA longer than 10 years. Furthermore, S.C. Code Ann. § 58-41-20(F)(2) states:

Once an electrical utility has executed interconnection agreements and power purchase agreements with qualifying small power production facilities located in South Carolina with an aggregate nameplate capacity equal to twenty percent of the previous five-year average of the electrical utility's South Carolina retail peak load, that electrical utility shall offer to enter into fixed price power purchase agreements with small power producers for the purchase of energy and capacity at avoided cost, with the terms, conditions, rates, and terms of length for contracts as determined by the commission in a separate docket or in a proceeding conducted pursuant to subsection (A).

⁷ In fact, nothing in PURPA or FERC’s implementing regulations or orders requires the consideration of ensuring adequate and available financing for QFs when setting avoided cost rates. To the contrary, PURPA specifically provides that “[n]o ... rule ... [regarding the sale and purchase of QF power] shall provide for a rate which exceeds the incremental cost to the electric utility of alternative electric energy.” 16 U.S.C.A. § 824a-3(b). PURPA’s implementing regulations also expressly provide that “[n]othing ... requires any electric utility to pay more than the avoided costs for purchases” from QFs. 18 C.F.R. § 292.304(a)(2). Similarly, by setting a ceiling of incremental cost on the amount a utility should be required to pay for a QF’s power, Congress expressed that PURPA is “not intended to require the rate payers of a utility to subsidize cogenerators or small power producers.” Joint Conference Committee Report, H.R.Rep. No. 95-1750 at 98, 1978 U.S.C.C.A.N. 7797, 7832.

DESC has exceeded the 20% threshold; therefore, under Act No. 62, it could apply to the Commission for a term less than 10 years. DESC, however, entered into a settlement agreement with the SCSBA filed in Docket No. 2017-370-E to provide contract terms for 10-year durations through December 31, 2023. Accordingly, this issue is not properly before the Commission.

Nevertheless, DESC notes that Power Advisory concluded that “without higher longer (*sic*) contract length, the solar industry would not be able to finance PURPA projects in South Carolina because they would not be economical.” Report at 51. The Company notes that Power Advisory does not base this conclusion on any meaningful analysis, but on its unsupported assertion that because other utilities in other states contracted for solar PPAs at a price of \$36 to \$38/MWh and for terms of 20-30 years, solar QFs in South Carolina must not be able to obtain financing for 10-year terms at the rates proposed by DESC. Not only is there absolutely no support in the record for this suggestion, it also directly contradicts Power Analysis’ prior recognition “that caution should be exercised when comparing avoided cost estimates between two different companies and when doing so consideration needs to be given to differences in their resource mix and demand profile.” Report at 39, n.121. Because there is no basis to support either Power Advisory’s statement or PPAs with a tenor longer than 10 years, and because Act No. 62 requires the approval of 10-year PPAs, this issue is not relevant and should not be considered by the Commission.

B. PPA Standard Offer Terms and Conditions

1. Liquidated Damages and Extension Payments

As to Liquidated Damages and Extension Payments, Power Advisory again bases its assessment not on any independent analysis, but solely on the suggestions of SCSBA and terms offered by other utilities, even though it has acknowledged that such a comparison is inappropriate. Nevertheless, in comparison to the unsubstantiated claims by SCSBA that liquidated damages

should be lower, DESC Witness Kassis testified that, based on historical experience in the market, it would take DESC a year to replace the resources which would have been provided by a QF. Accordingly, this provides substantial evidence to support DESC's position. In contrast, there is nothing to support Power Advisory's suggestion that liquidated damages should be based on a formula agreed to by SCSBA and another utility. This also is contrary to its position on page 61 of the Report that it does "not recommend a lowest common denominator approach to establishing terms and conditions."

2. Guaranteed Energy Production

With regard to "Guaranteed Energy Production" requirements, DESC's Standard Offer and Form PPA provide estimates of the expected annual output of Net Energy for each year of the contract term. Under a Standard Offer and Form PPA, a QF is obligated to operate in a manner that produces 95% of its Guaranteed Energy Production. However, DESC provides flexibility to QFs by providing a buffer of 10% before liquidated damages are charged; i.e. no penalties are charged for a shortfall as long as the QF achieves 85% of its contracted guaranteed energy production. Nevertheless, if the Facility fails to deliver the guaranteed energy production in any particular Contract Year, a shortfall occurs subjecting the Seller to Performance Liquidated Damages, which must be paid within thirty days of receipt of an invoice.

The record reflects that compliance with this provision is primarily in the control of the QF because the inability of a solar generating facility to satisfactorily perform typically results from either design flaws, equipment issues, or maintenance-related failures. Tr. at 66.21. Accordingly, given that the QF's Guaranteed Energy Production is only 85% of the Contract Quantity to which it agreed, and considering the control QFs have over energy production, as well as the potential consequences of an energy shortfall, the contract remedy of termination is appropriate.

Power Advisory ignores this evidence, however, and improperly relies upon its comparison of terms and conditions from utilities in other states. Specifically, it concludes that “providing a termination right for a PPA where pricing is based on avoided costs and thereby reflects the buyer’s cost of generating or purchasing the power is outside the norm,” which is apparently based solely on its analysis of three PPA forms—one from a utility in California and two from the state of Washington. Because there is no basis for Power Advisory’s recommendation, and because DESC has presented substantial evidence to support its position, the Commission should decline to follow Power Advisory’s suggestion.

3. Termination Payment

Power Advisory also concludes that DESC’s “proposed Termination Payment does not appear to be consistent with any actual damages or consequences experienced by DESC as a result of contract termination.” Report at 65. However, it does so after it quoted DESC Witness Kassis’ testimony that “DESC accounts for these generating assets in its resource plan and relies on these plants performing pursuant to the contract” and that “when a QF terminates after COD, DESC incurs damages in the form of lost opportunities, e.g., self-build, RFP, or other competitive solicitation or procurement options.” Tr. at 66.25. This provides substantial evidence to demonstrate that such a termination provision is reasonable and Power Advisory’s suggestion otherwise is without any basis.

C. Notice of Commitment to Sell Form

1. Limiting PPA Eligibility Following Termination

Power Advisory also provides no basis for its assessment that a QF that fails to perform should be liable for the same damages per the Standard Offer and Form PPA. As with a number of other recommendations, Power Advisory does not base this assessment on any independent

analysis. Rather, it simply adopts the position advanced by SCSBA without any other supporting evidence. As DESC Witness Kassis testified, however, this provision was added because, “[i]f the avoided cost rates increase after establishment of the LEO and the QF has not executed a PPA, the QF could walk away from its LEO in an attempt to enjoy the higher avoided cost rates.” Tr. at 59.27. He further testified that such an event “would shift risk from the QF onto the utility’s customers if this was allowed unchecked and the utility’s customers would bear the burden of an inflated avoided cost rate.” Thus, this provision is necessary to prevent QFs from “gaming” the system. Power Advisory does not address any of these issues but merely adopts the position advanced by SCSBA. Because there is no basis to do so, its assessment should not be given any weight by the Commission.

2. 365 Day In-service Deadline

In continuing with its theme of adopting the positions of other parties without any basis, Power Advisory next agrees with SCSBA’s proposal to make the Seller’s obligation to commence delivery within 365 days of its NOC Form subject to the same Excusable Delays as the in-service deadline under the Form PPA. DESC considers this matter to be resolved, however, as DESC Witness Kassis clarified that the 365-day period will be extended where the utility is delayed in constructing interconnection facilities or related network upgrades. Tr. at 66.19.

3. Eligibility Pre-Conditions

Power Advisory concludes its Report with one final acquiescence to the proposal made by SCSBA regarding Eligibility Conditions. Specifically, it concludes that QFs should be allowed to secure permits after formation of a LEO, not based on anything of substance, but merely because SCSBA agreed to the 365-day in-service date requirement. In reaching this conclusion, Power Advisory misses the most fundamental element of a LEO—that a QF demonstrate its “substantial

commitment” first in order to establish a LEO.⁸ Accordingly, requiring permits prior to the formation is not “unnecessarily onerous on the QF” as Power Advisory suggests, but serves the legitimate purpose of allowing a QF to demonstrate its substantial commitment. Indeed, in its Notice of Proposed Rulemaking date September 19, 2019, FERC itself stated:

Our objective in requiring a showing of commercial viability and the QF’s financial commitment to construct the project is to ensure that no electric utility obligation is triggered for those QF projects that are not sufficiently advanced in their development and, therefore, for which it would be unreasonable for a utility to include in its resource planning, while at the same time ensuring that the purchasing utility does not unilaterally and unreasonably decide when its obligation arises. States may require a showing, for example, that a QF has satisfied, or is in the process of undertaking, at least some of the following prerequisites: (1) obtaining site control adequate to commence construction of the project at the proposed location; (2) filing an interconnection application with the appropriate entity; (3) securing local permitting and zoning; or (4) other similar, objective, reasonable criteria that allow a QF to demonstrate its commercial viability and financial commitment to construct the facilities. These indicia are not intended to be exhaustive and the Commission seeks comment on these indicia and others that also might be appropriate for consideration.

Qualifying Facility Rates & Requirements Implementation Issues Under the Pub. Util. Regulatory Policies Act of 1978, 168 FERC ¶ 61184 at 90 (Sept. 19, 2019) (emphasis added). *See also* Tr. at 66.37-38 (“The fundamental difference between Mr. Levitas’s desire and the FERC’s policy is that the FERC suggests that the QF should commence with the development of its project prior to establishing a LEO.”). Power Advisory’s assessment that securing such permits should not be required before establishing a LEO therefore is without merit and should not be adopted by the Commission.

⁸ *See, e.g., JD Wind I, LLC*, 129 FERC ¶ 61,148 (2009) (“Accordingly, a QF, by committing itself to sell to an electric utility, also commits the electric utility to buy from the QF; these commitments result either in contracts or in non-contractual, but binding, legally enforceable obligations.”)

CONCLUSION

For the reasons discussed herein, DESC submits that the Report submitted by Power Advisory on November 4, 2019 is fundamentally flawed, misconstrues the facts and evidence contained in the filings in this case and presented at the hearing in this matter, fails to perform the analysis that was statutorily required, and improperly attempts to assume this Commission's role as the finder of facts and conclusions in these proceedings. DESC therefore submits that the Report should be disregarded by the Commission in its entirety and stricken from the record.

Respectfully submitted,

K. Chad Burgess, Esquire
 Matthew Gissendanner, Esquire
 Mail Code C222
 220 Operation Way
 Cayce, SC 29033-3701
 Phone: (803) 217-8141 (KCB)
 (803) 217-5359 (MWG)
 Email: chad.burgess@scana.com
 matthew.gissendanner@scana.com

s/ Mitchell Willoughby
 Mitchell Willoughby, Esquire
 Andrew R. Hand, Esquire
 Willoughby & Hoefer, P.A.
 930 Richland Street (29201)
 PO Box 8416
 Columbia, SC 29202-8416
 Phone: (803) 252-3300
 Email: mwilloughby@willoughbyhoefer.com
 ahand@willoughbyhoefer.com

Belton Zeigler, Esquire
 Womble Bond Dickinson (US) LLP
 1221 Main Street, Suite 1600
 Columbia, SC 29201
 Phone: 803-454-7720
 Email: Belton.Zeigler@wbd-us.com

Columbia, South Carolina
 November 8, 2019

Attorneys for Dominion Energy South Carolina, Inc.